Please add new claims 13-37 as follows:

--13. A method of improving mucus clearance comprising administering to the respiratory tract of a patient in need of such treatment an effective amount of a polysaccharide having about the same number of hydrogen bonding sites as dextran.

(what is this number?)

- 14. A method of improving mucus clearance comprising administering to the respiratory tract of a patient in need of such treatment an effective amount of a polysaccharide having sugar mojeties that stereochemically complement the oligosaccharide mojeties native to the respiratory tract mucins in the manufacture of a medicament to improve mucus clearance.
- 15. The method of claim 14, wherein the polysaccharide comprises oligomers of galactose and fucose and the amino sugars glucosamine and galactosamine.
- 16. The method of claim 13, wherein the polysaccharide is administered in admixture with a pharmaceutically acceptable diluent of carrier.
- 17. The method of claim 16, wherein the diluent is sodium chloride or ringer solution.
- 18. The method of claim 13, wherein the polysaccharide is administered to the respiratory tract topically or by aerosol.

- The method of claim 13, wherein the polysaccharide is present in the respiratory\secretion at a concentration of about 4 mg/ml to about 40 mg/ml.
- 20. The method of claim 14, wherein the polysaccharide is administered in admixture with a pharmaceutically acceptable diluent or carrier.
- The method of claim 20, wherein the diluent is sodium chloride or ringer 21. solution.
- The method of claim 14, wherein the polysaccharide is administered to the 22. respiratory tract topically or by aerosol.
- 23. The method of claim 14\wherein the polysaccharide is present in the respiratory secretion at a concentration of about 4 mg/ml to about 40 mg/ml.
- 24. A method of treating lung disease associated with impaired mucus clearance comprising administering to the respiratory tract of a patient in need of such treatment an effective amount of a polysaccharide having about the same number of hydrogen bonding sites as dextran.
- The method of claim 24, wherein the lung disease is cystic fibrosis, chronic 25. bronchitis, bronchiectasis or bronchial asthma.

A method of treating lung disease associated with impaired mucus clearance comprising administering to the respiratory tract of a patient in need of such treatment an effective amount of a polysaccharide having sugar moieties that stereochemically complement the oligosaccharide moieties native to the respiratory tract mucins in the manufacture of a medicament to improve mucus clearance.

- 27. The method of claim 26, wherein the polysaccharide comprises oligomers of galactose and fucose and the amino sugars glucosamine and galactosamine.
- 28. The method of claim 26, wherein the lung disease is cystic fibrosis, chronic bronchitis, bronchiectasis or bronchial asthma.
- 29. A method of improving muchs clearability in a patient having cystic fibrosis comprising administering to the respiratory tract of a patient in need of such treatment an effective amount of a polysaccharide having about the same number of hydrogen bonding sites as dextran.
- 30. The method of claim 29, further comprising the step of assessing liquification of secretions of said patient following treatment.
- 31. The method of claim 29, further comprising the step of assessing viscosity and elasticity of sputum of said patient following the treatment.

- The method according to claim 29, wherein the polysaccharide is present in the respiratory secretion at a concentration of about 4 mg/ml to about 40 mg/ml.
- 33. A method of improving mucus clearability in a patient having cystic fibrosis comprising administering to the respiratory tract of a patient in need of such treatment an effective amount of a polysaccharide having sugar moieties that stereochemically complement the oligosaccharide moieties native to the respiratory tract mucins in the manufacture of a medicament to improve mucus clearance.
- 34. The method of claim 33, wherein the polysaccharide comprises oligomers of galactose and fucose and the amino sugars glucosamine and galactosamine.
- 35. The method of claim 33, further comprising the step of assessing liquification of secretions of said patient following treatment.
- 36. The method of claim 33, further comprising the step of assessing viscosity and elasticity of sputum of said patient following the treatment.
- 37. The method according to claim 33, wherein the polysaccharide is present in the respiratory secretion at a concentration of about 4 mg/ml to about 40 mg/ml.--